



1·2·3 FÉVRIER 2023

MARSEILLE · PALAIS DU PHARO



Le multitronculaire: quand et comment?

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Disclosures

Speaker and/or consulting fees: Abbott, Amgen, Astra Zeneca, Bayer, BMS, Novo Nordisk, Sanofi

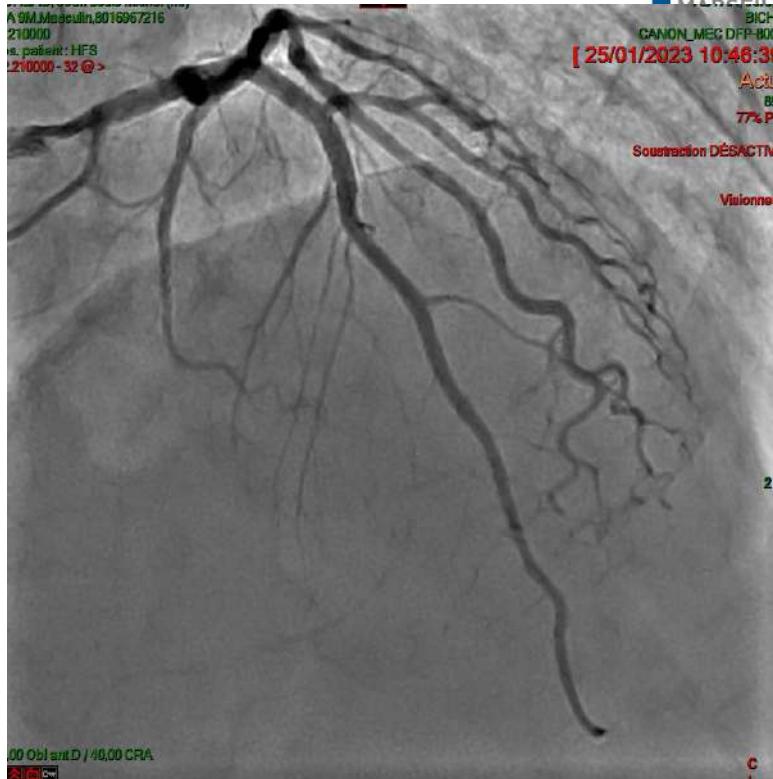
CEC, DSMB, Steering committee: Amgen, Novo Nordisk, Janssen

Proctoring: Boston scientific

M. R, 74 ans

- HTA
 - Dyslipidémie
 - Tabac actif
-
- 1997: STEMI inférieur (ATL CD).
 - Pas de séquelle, fonction VG préservée
-
- STEMI antérieur pris en charge à H2

210000
patient : HFS
210000 - 32 @>
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CANON_MEC_DFP-00
Actu
77% P
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STEMI multtronculaire: quand et comment?

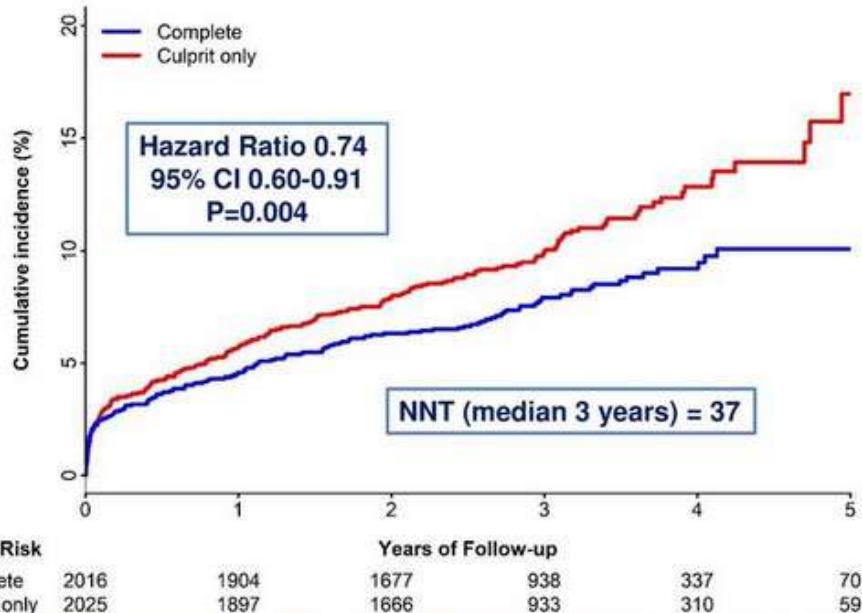
- Faut-il revasculariser les lésions non coupables?

COMPLETE

revascularisation complète vs. Lésion coupable
uniquement > 4000 patients

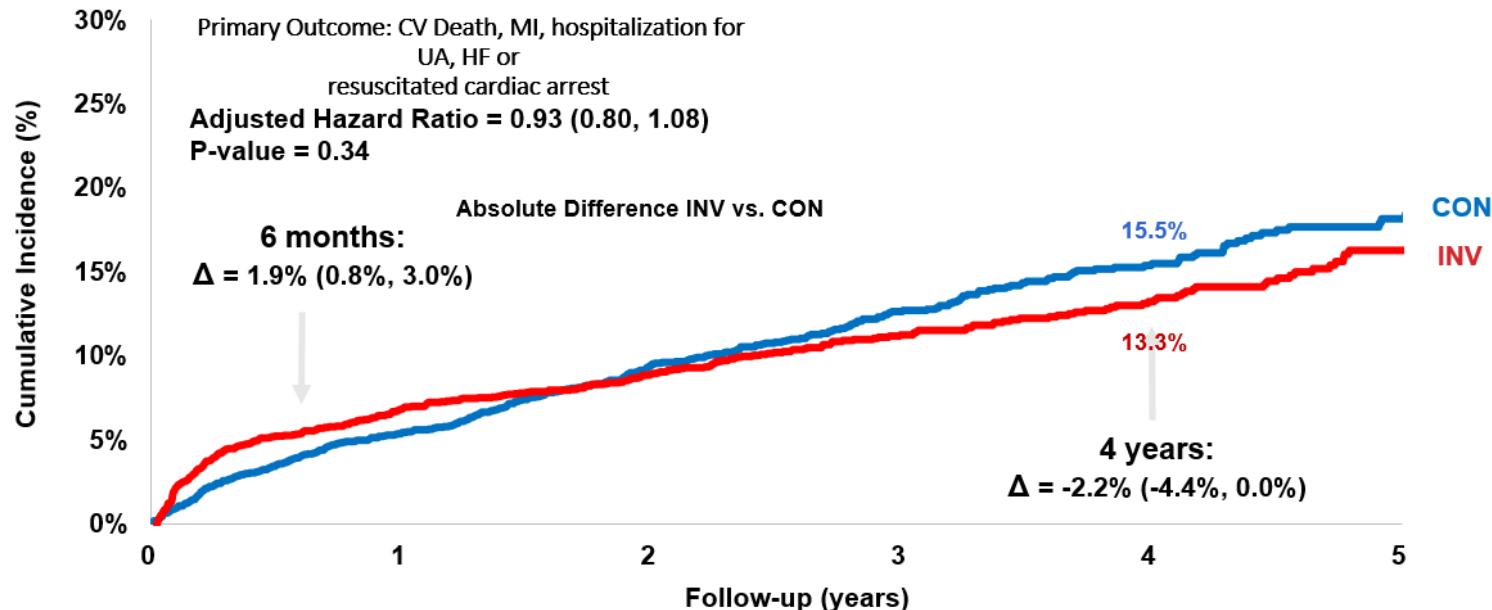


First Co-Primary Outcome: CV Death or New MI



Mehta et al NEJM 2019

ISCHEMIA

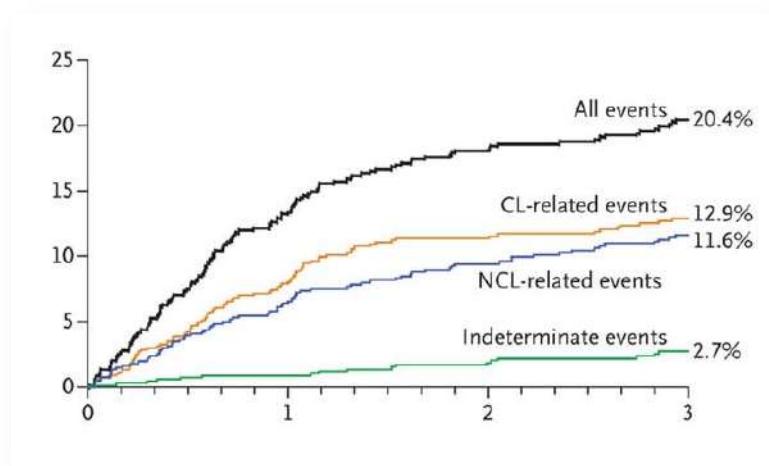


Subjects at Risk

CON	2591	2431	1907	1300	733	293
INV	2588	2364	1908	1291	730	271

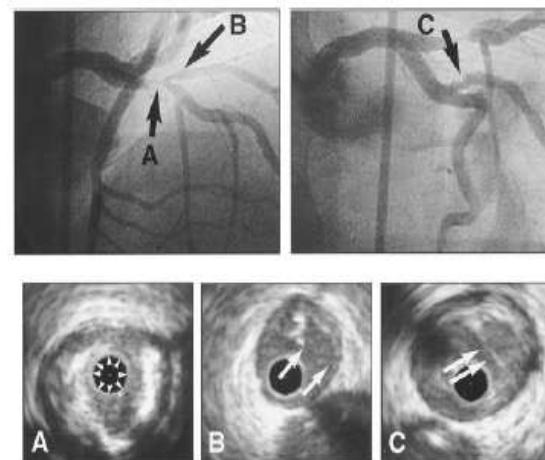
Le SCA est une pathologie diffuse

La moitié des événements après SCA ne sont pas en rapport avec la lésion coupable



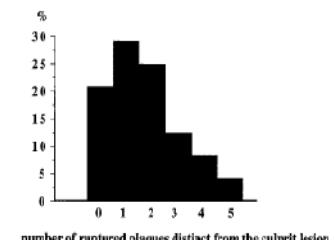
Etude PROSPECT: Événements CV majeurs chez 697 Pts post SCA

Stone GW et al. *N Engl J Med* 2011



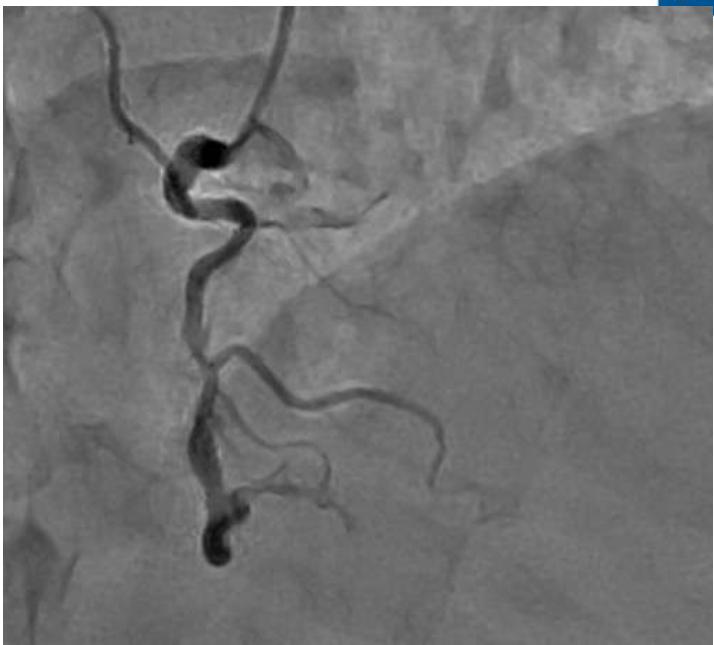
24 patients SCA IVUS 3 Vaisseaux

Riouffol et al *Circ* 2002



STEMI multtronculaire: quand et comment?

- Faut-il revasculariser les lésions non coupables?
- Quelles lésions revasculariser?





FLOWER-MI

STEMI patients with successful culprit lesion PCI (primary, rescue or pharmaco-invasive) and $\geq 50\%$ stenosis in at least one additional non-culprit lesion



Randomization
1:1

1170 patients
40 centres
2,5 ans



Complete revascularisation
Angio-guided PCI
(during the index hospital admission)
+
OMT

Complete revascularisation
FFR-guided PCI
(during the index hospital admission +)
+
OMT

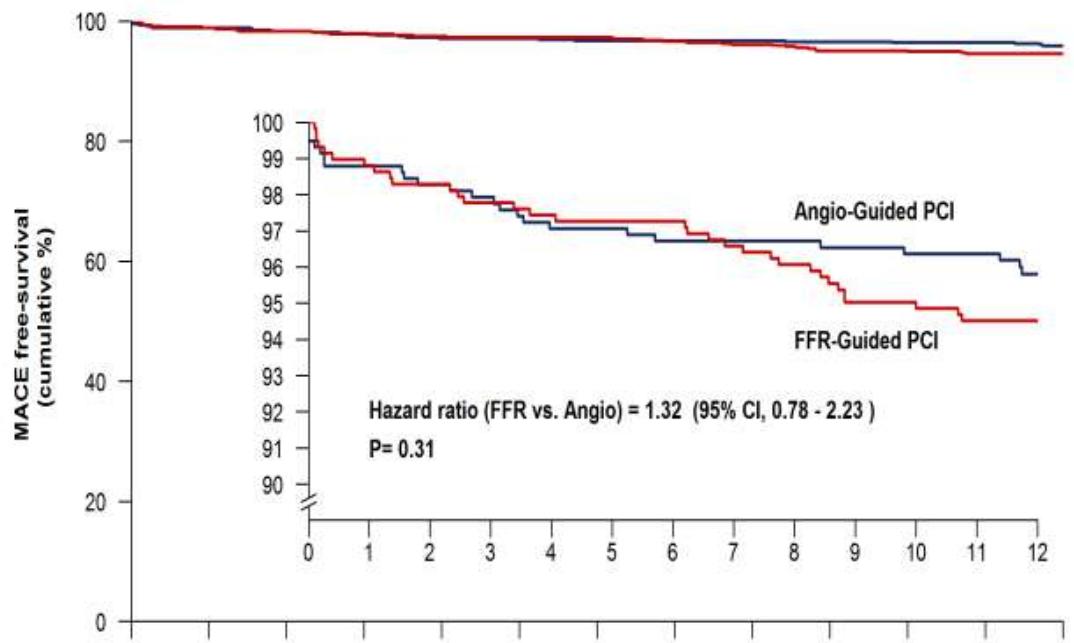
Follow-up : Discharge, 1, 6 and 12 months

Primary Efficacy Outcome: death or non-fatal MI or unplanned hospitalization leading to urgent revascularization at 12 months

Puymirat et al
NEJM 2021



FLOWER-MI



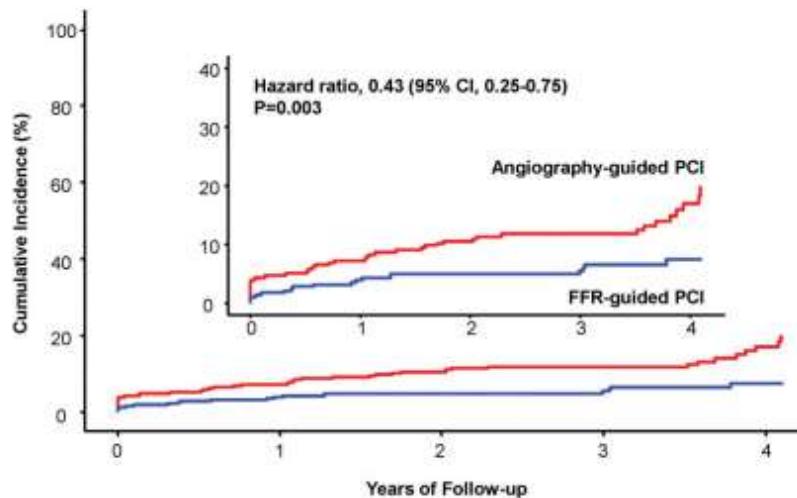
Angio-Guided PCI	577	570	567	565	560	560	557	555	555	554	552	548	371
FFR-Guided PCI	586	577	573	570	567	566	566	562	559	553	553	549	385

Puymirat et al
NEJM 2021

FRAME-AMI

562 patients angio guided vs. FFR guided

Primary endpoint:
death, MI,
revascularization.

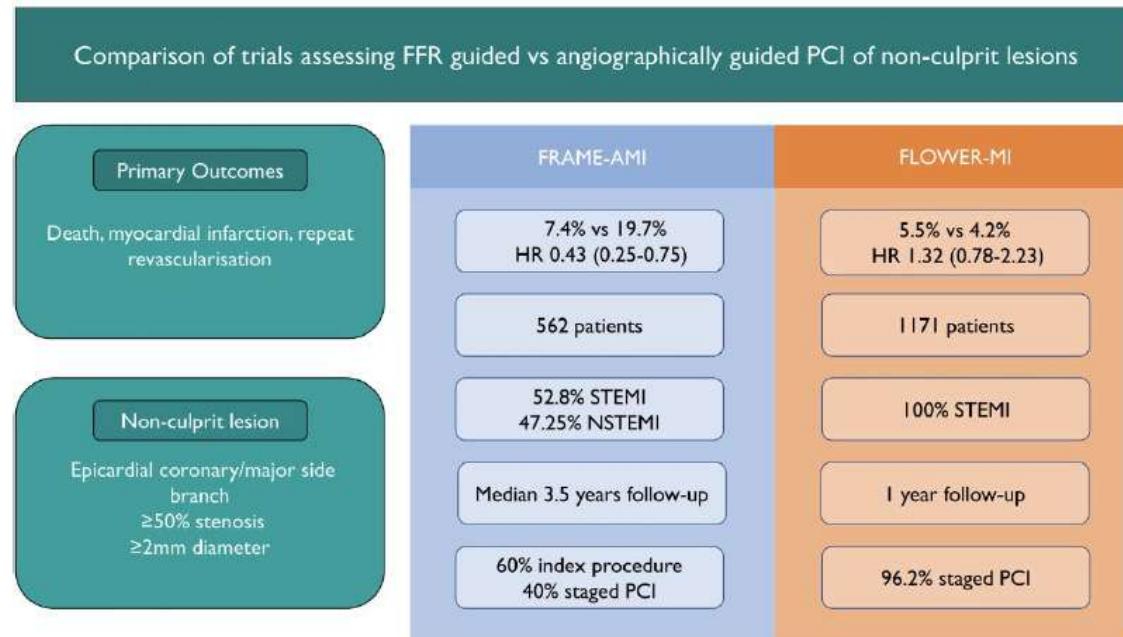


No. at Risk

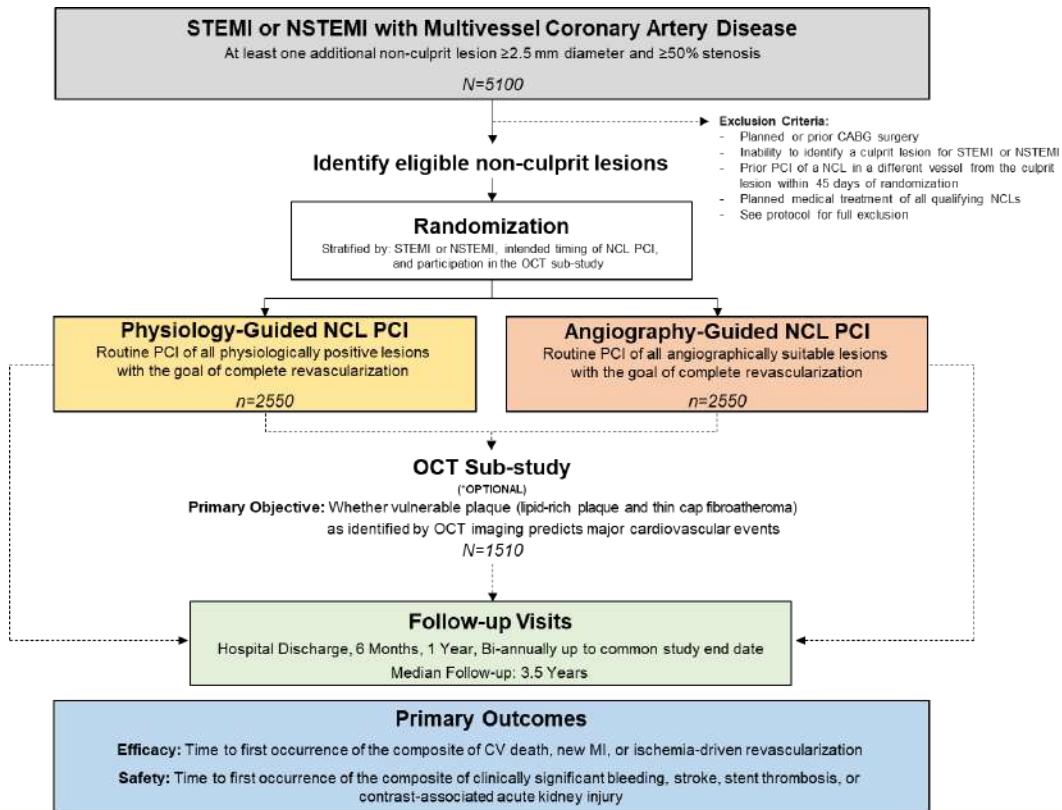
Angiography-guided PCI	278	257	223	173	74
FFR-guided PCI	284	271	237	186	79

Lee et al EHJ 2022

FLOWER-MI vs. FRAME-MI: pourquoi une telle différence?



COMPLETE-2



STEMI multtronculaire: quand et comment?

- Faut-il revasculariser les lésions non coupables?
- Quelles lésions revasculariser?
- Quand revasculariser les lésions non coupables?

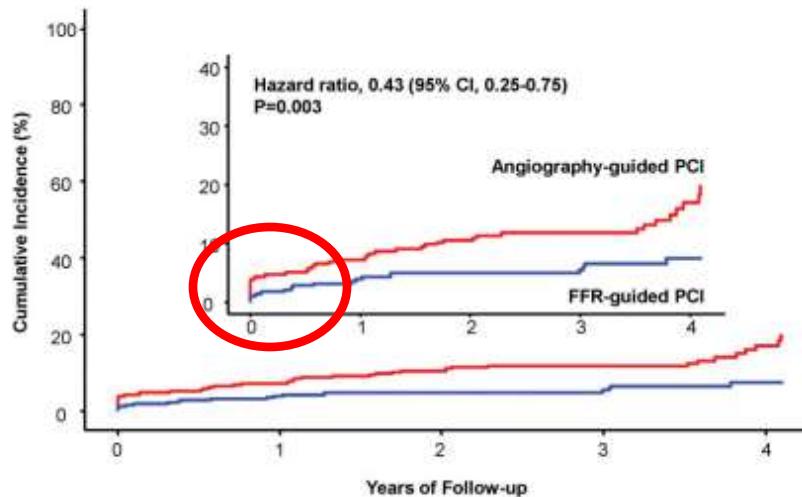
STEMI multtronculaire: quand et comment?

- Faut-il revasculariser les lésions non coupables?
- Quelles lésions revasculariser?
- Quand revasculariser les lésions non coupables?
 - Durant la procédure index?

FRAME-AMI

562 patients angio guided vs. FFR guided

Primary endpoint:
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No. at Risk

Angiography-guided PCI	278	257	223	173	74
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Lee et al EHJ 2022

STEMI multtronculaire: quand et comment?

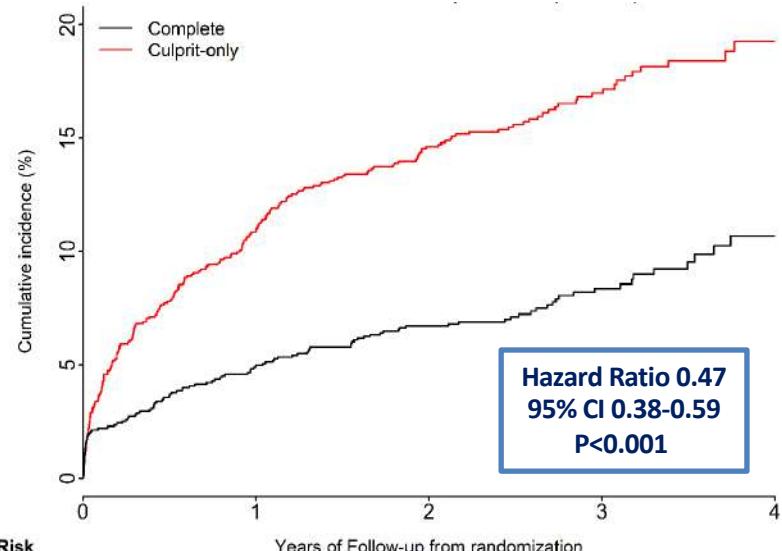
- Faut-il revasculariser les lésions non coupables?
- Quelles lésions revasculariser?
- Quand revasculariser les lésions non coupables?
 - Durant la procédure index?
 - Durant l'hospitalisation index?



Timing Analysis: Second Co-Primary Outcome CV death, MI or IDR



Index Hospitalization



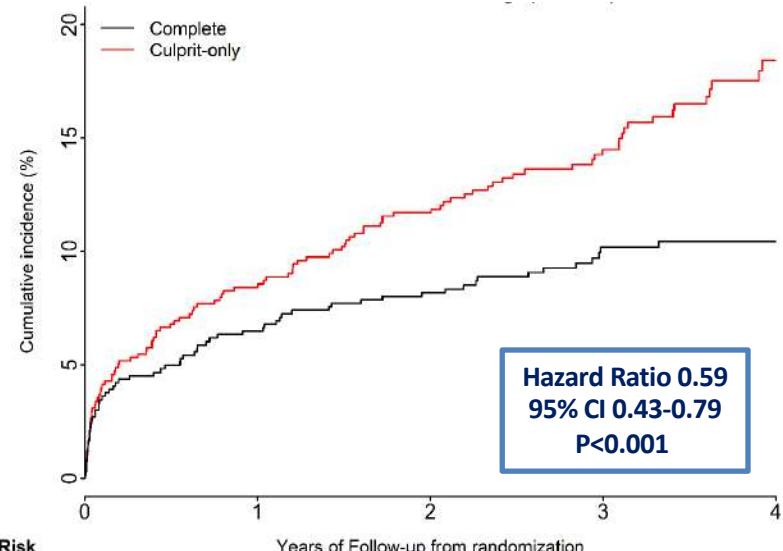
Hazard Ratio 0.47
95% CI 0.38-0.59
P<0.001

No. at Risk

	0	1	2	3	4
Complete	1353	1270	1093	533	149
Culprit-only	1349	1189	1008	489	132

Years of Follow-up from randomization

After Discharge



Hazard Ratio 0.59
95% CI 0.43-0.79
P<0.001

No. at Risk

	0	1	2	3	4
Complete	663	616	566	392	180
Culprit-only	676	619	551	376	162



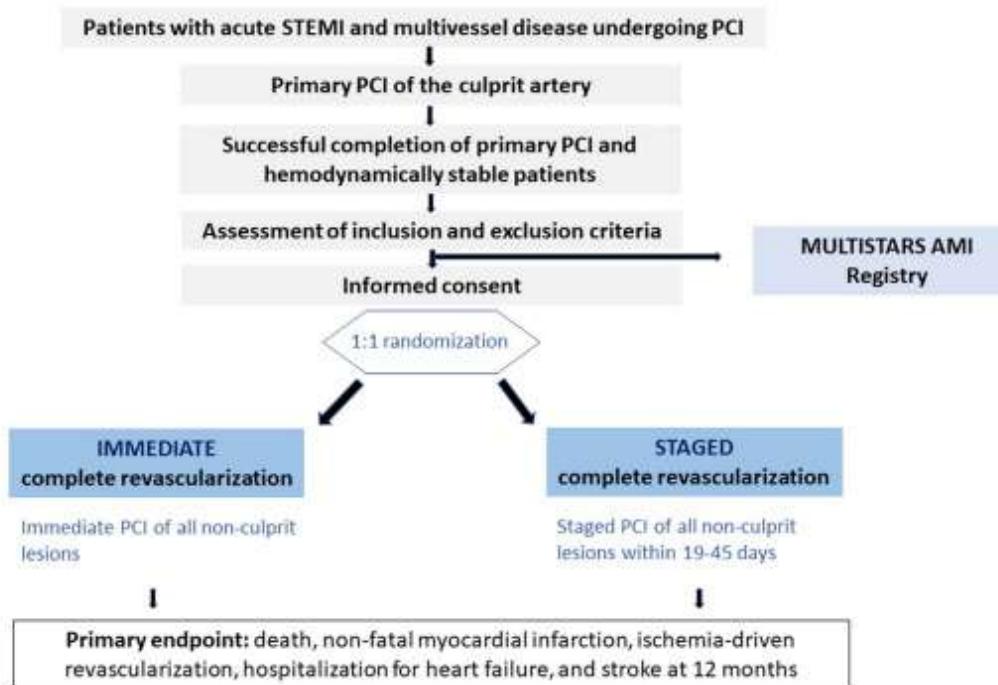
Population Health
Research Institute
HEALTH THROUGH KNOWLEDGE

Wood DA et al. J Am Coll Cardiol 2019

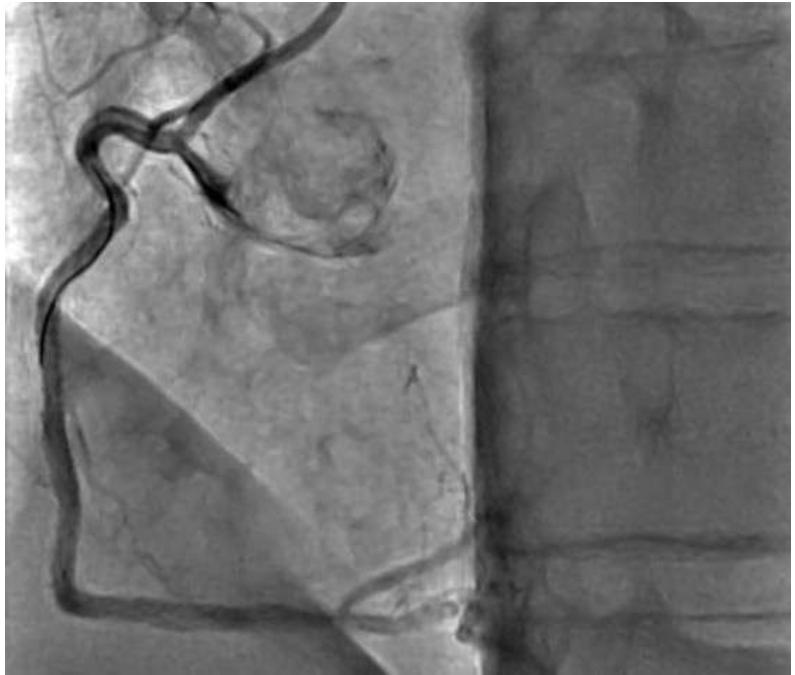


MULTISTARS

840 patients STEMI MVD



Stahli et al Am Heart J 2020



STEMI multtronculaire: quand et comment?

- Faut-il revasculariser les lésions non coupables?: Oui+++
- Quelles lésions revasculariser? Reste à définir (COMPLETE 2)
- Quand revasculariser les lésions non coupables? Timing optimal à définir